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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22902 7590 12/12/2008

CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005 EXAMINER
MCCALL, ERIC SCOTT

PAPER NUMBER

2855
DATE MAILED: 12/12/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNISY DOCKSIT NO.
 CONFRMATION NO.

 10/577,071
 03/16/2007
 Anthony Pfallip Pollard
 70272-0086
 9020

TITLE OF INVENTION: AUTOMOTIVE FUEL INJECTOR LEAKAGE TESTER

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(8) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 03/12/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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| appropriate. All further<br>indicated unless corrects<br>maintenance fee notifica  | correspondence includir<br>ed below or directed oth  | ng the Patent, advance on<br>herwise in Block 1, by (a   | rders and notification of n<br>a) specifying a new corres   | pondence address; a  | Il be mailed to the curren<br>and/or (b) indicating a sep  | t correspondence address as<br>varate "FEE ADDRESS" for  |  |
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| SUITE 250  | T AVENUE, NW   | /2008  | Lhe   | Certify  | ficate of Mailing or Tran  |  |  |
| WASHINGTON   | N, DC 20003  |  |   |  |  | (Depositor's name)   |  |
|  |  |  | <u> </u>  |  |  | (Signature)  |  |
|  |  |  |   |  |  | (Date)   |  |
| APPLICATION NO.  | FILING DATE  |  | FIRST NAMED INVENTOR  | /  | ATTORNEY DOCKET NO.  | CONFIRMATION NO.   |  |
| 10/577,071<br>TITLE OF INVENTION   | 03/16/2007<br>: AUTOMOTIVE FUEL  | INJECTOR LEAKAGE   | Anthony Phillip Pollard<br>TESTER   |  | 70272-0086   | 9020   |  |
| APPLN. TYPE  | SMALL ENTITY   | ISSUE FEE DUE  | PUBLICATION FEE DUE   | PREV. PAID ISSUE   | FEE TOTAL FEE(S) DU  | E DATE DUE   |  |
| nonprovisional   | YES  | \$755  | \$300   | \$0  | \$1055   | 03/12/2009   |  |
| EXAM   | IINER  | ART UNIT   | CLASS-SUBCLASS  |  |  |  |  |
| MCCALL, E  | RIC SCOTT  | 2855   | 073-114450  | •  |  |  |  |
| "Fee Address" ind<br>PTO/SB/47; Rev 03-0<br>Number is required.  3. ASSIGNEE NAME A  | ondence address (or Cha<br>B/122) attached.<br>ication (or "Fee Address<br>22 or more recent) attach<br>ND RESIDENCE DATA                                  | nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2  | 2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be THE PATENT (print or typ data will appear on the p T a substitute for filing an. | 3 registered patent vely,<br>e firm (having as a nigent) and the names<br>meys or agents. If no<br>printed,  | nember a 2<br>of up to<br>o name is 3  | document has been filed for  |  |
| Please check the appropr  4a. The following fee(s).  | riate assignee category or   | categories (will not be pr   | (B) RESIDENCE: (CITY inted on the patent):  | Individual 🖵 Corp  | poration or other private g  | roup entity Government   |  |
| Issue Fee Publication Fee (N   | wo small entity discount p   | permitted)   | A check is enclosed.  Payment by credit can   | d. Form PTO-2038 i   | is attached.   | leficiency, or credit any<br>an extra copy of this form).  |  |
| <ol> <li>Change in Entity Sta</li> <li>Applicant claim</li> </ol>  | tus (from status indicated<br>s SMALL ENTITY state   |  | ☐ b. Applicant is no long   | ger claiming SMALI   | ENTITY status. Sec 37 C  | CFR 1.27(g)(2).  |  |
| NOTE: The Issue Fee an<br>interest as shown by the   | d Publication Fee (if req<br>records of the United Sta   | uired) will not be accepte<br>tes Patent and Trademark   | d from anyone other than the Office.  | he applicant; a regist   | ered attorney or agent; or   | the assignee or other party in   |  |
| Authorized Signature   |  |  |   | Date   |  |  |  |
| Typed or printed name  |  |  |   | Registration No  |  |  |  |
| This collection of inform<br>an application. Confiden<br>submitting the complete<br>this form and/or suggesti<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223 | nation is required by 37 C<br>tiality is governed by 35<br>d application form to the<br>ions for reducing this but<br>(irginia 22313-1450. DC<br>k13-1450. | FR 1.311. The informatic<br>U.S.C. 122 and 37 CFR<br>USPTO. Time will vary<br>rden, should be sent to the<br>ONOT SEND FEES OR 6 | on is required to obtain or r<br>1.14. This collection is est<br>depending upon the indiv<br>e Chief Information Office<br>COMPLETED FORMS TO   | etain a benefit by the<br>imated to take 12 mi<br>idual case. Any com<br>r, U.S. Patent and Ti<br>D THIS ADDRESS.  | e public which is to file (an<br>inutes to complete, includi<br>iments on the amount of t<br>rademark Office, U.S. De<br>SEND TO: Commissioner | nd by the USPTO to process)<br>ing gathering, preparing, and<br>ime you require to complete<br>partment of Commerce, P.O.<br>for Patents, P.O. Box 1450, |  |

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DATE MAILED: 12/12/2008

| APPLICATION NO. | FILING DATE   | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------|---------------|-------------------------|-------------------------|------------------|
| 10/577,071      | 03/16/2007    | Anthony Phillip Pollard | 70272-0086              | 9020             |
| 22902 75        | 90 12/12/2008 |                         | EXAMINER                |                  |
| CLARK & BRODY   |               | MCCALL, ERIC SCOTT      |                         |                  |
| 1090 VERMONT    | AVENUE, NW    |                         | ART UNIT                | PAPER NUMBER     |
| SUITE 250       | 200005        |                         | 2855                    |                  |
| WASHINGTON, I   | JC 20005      |                         | DATE MAIL UD. 12012/200 | 10               |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 117 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 117 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/577.071 POLLARD ET AL Notice of Allowability Examiner Art Unit Fric S. McCall 2855 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the Applicant's election dated Oct. 02, 2008. 2. The allowed claim(s) is/are 1-24. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

| Attachment(s | ) |
|--------------|---|
| 1. Notice of |   |

- References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date 3/16/07
- 4. T Examiner's Comment Regarding Requirement for Deposit
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Notice of Allowability

# AN AUTOMOTIVE FUEL INJECTOR LEAKAGE TESTER

# EXAMINER'S AMENDMENT

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### CLAIMS

Cancel non-elected claims 25-36.

Application/Control Number: 10/577,071 Page 3

Art Unit: 2855

# REASONS FOR ALLOWANCE

Claims 1-23 have been found to be allowable over the prior art because the prior art fails to teach or suggest an automotive fuel injector leakage tester (10) comprising:

a flowmeter (66) arranged to measure leaked fuel flow *rates* through the nozzle (34) of the injector (32),

an interface passageway (58) which enables fluid communication between the injector nozzle (34) and the flowmeter (66),

wherein the tester (10) being so constructed that the interface between the first and second liquids as claimed remains within the interface passageway (58) whilst the flowmeter (66) provides a measure of the leakage of the first liquid through the nozzle (34) of the injector.

Claim 24 has been found to be allowable over the prior art because the prior art fails to teach or suggest a method of testing an automotive fuel injector for leakage, characterised in that:

a first liquid is allowed to leak from the nozzle (34) of an injector (32) into an interface passageway (58) which contains a second liquid and which provides fluid communication between the injector nozzle (34) and a flowmeter (66),

the second liquid being immiscible with the first, and the interface between the first and second liquids remaining within the interface passageway (58) whilst the flowmeter (66) provides a measure of the leakage of the first liquid through the nozzle (34) of such an injector.

Art Unit: 2855

CONTACT INFOMRATION

Any comments considered necessary by the Applicant must be submitted no later than

the payment of the issue fee and, to avoid processing delays, should preferably accompany the

issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric S. McCall/ Primary Examiner

Art Unit 2855